June 29, 2000

Dockets Management System
U.S. Dept. of Transportation, PL 401
400 7th Street, SW
Washington, D.C. 20590-0001

RE: Comments on Proposed Rulemaking to Amend Hazardous Materials Regulations

The Florida Department of Health is authorized by Chapter 404, Florida Statutes, to enforce U.S. Department of Transportation regulations within Florida. Chapter 64E-5, Florida Administrative Code ("Control of Radiation Hazard Regulations"), provides radiation protection standards and related rules compatible with the U.S. Nuclear Regulatory Commission's 10 CFR. Part XV of Chapter 64E-5 addresses transportation of radioactive materials. Changes in 49 CFR impact both our department and our regulated community.

In response to docket # RSPA-99-6283 relative to DOT's adoption of IAEA Standard ST-1 "Regulations for the Safe Transport of Radioactive Materials" (1996), the below comments are submitted on behalf of the Florida Department of Health, Bureau of Radiation Control.

1. ST-1 570 requires placarding of rail and road vehicles carrying labeled radioactive packages.

Florida considers this proposed change to be excessively burdensome, unreasonable and unjustified. We believe expansion of the placarding requirement will be cost prohibitive, will not improve the safety of radioactive material transportation, and is inconsistent with the level of hazard represented by Radioactive White I and Yellow II shipments. It has been our understanding that a major purpose of the current package label system is to provide for a graded approach to regulation consistent with the hazard present. No such graded approach is apparent in this requirement. Perhaps the DOT can explain the safety value of placarding all vehicles when the external radiation level at the surface of the package is less than 0.005 mSv/hr (0.5 mrem/hr), or even 0.5 mSv/hr (50 mrem/hr). We are aware of no excessive hazard or measurable harm to anyone under the current practice of not placarding at these levels, nor are we award of any instances where individuals have been harmed under the current system. As a minimum, the DOT should publish its projections of dose, risk, and adverse effects avoided by placarding all vehicles for public evaluation and comment prior to adopting this requirement.

Anyone who regularly ships radioactive material is quite aware of the significant (and expensive) additional regulatory burdens attached to placarded vehicles, as they become commercial motor vehicles subject to a broad range of requirements specified in 49 CFR Parts 383 and 390 – 397. The financial costs associated with these requirements are significant and unwarranted.

Recommendation: The ST-1 570 requirement for placarding of rail and road vehicles carrying labeled radioactive packages should not be adopted. The existing requirement to placard only Radioactive Yellow III shipments is adequate and should not be changed.

2. ST-1 replaces the current regulatory threshold for "radioactive material" of 2 nCi/g specific activity with radionuclide-specific concentration and total consignment quantity limits.

The proposed concentration limits will result in many radionuclides with concentrations less than 2 nCi/g becoming classified as hazardous materials and therefore subject to increased regulation by the DOT. The current system is well understood and readily applied by the regulated community, whereas the proposed change with unnecessarily complicate the transportation of radioactive material and make compliance more difficult without a corresonding improvement in safety. As in the case of the proposed placarding change, the DOT should provide the results of its projections of dose, risk, and adverse effects avoided by implementing this rule change.

Recommendation: ST-1's replacement of the current regulatory threshold for radioactive material of 2 nCi/g specific activity with radionuclide-specific concentration and total consignment quantity limits should not be adopted. The existing classification method is adequate and should not be changed.

3. ST-1 305(b) requires workplace or individual monitoring for projected doses above 1 mSv (100 mrem).

This requirement is more restrictive than 10 CFR Part 20 and equivalent Agreement State regulations that require monitoring when doses are likely to exceed 5 mSv (500 mrem). Adopting the more restrictive requirement directly conflicts with existing state and federal regulations, would lead to confusion and non-compliance, create an unnecessary record-keeping burden, and most importantly, would not enhance the safety of the operations impacted by the rule. Furthermore, a requirement to demonstrate compliance when monitoring is not required would needlessly burden many organizations through additional labor and/or consulting costs.

Recommendation: Do not adopt the 305(b) requirement for workplace or individual monitoring for projected doses above 1 mSv (100 mrem).

4. ST-1 535 requires excepted packages to bear the UN marking on the outside of the package.

Current U.S. Department of Transportation (DOT) regulations do not require exterior marking of excepted packages. This is preferred because many carriers use the UN identification (as intended) as a hazard flag and some refuse to transport items with such markings. If it is agreed that the hazard from excepted packages is very low, then there is no need to "raise flags" to the carriers or restrict access to transportation modes through limited options or higher fees.

Recommendation: Do not adopt the portion of 535 requiring excepted packages to bear UN markings on the outside of the package.

5. ST-1 561 and current 49 CFR 173.415(a) require offerors of Specification 7A packages to have and maintain copies of the package test documentation on file.

This requirement appears to assume that there is a standard format for Type A test documentation, although section 173.461 and ST-1 701 both allow "reference to previous satisfactory demonstration of compliance of a sufficiently similar nature," "scale models," and "calculations or reasoned evaluation" as acceptable means of demonstrating compliance with the test requirements. As a result, Type A documentation may consist of statements to the effect that "Container model _____ has been tested per the applicable paragraphs of the DOT regulations and passed" or "Container model_____ is similar in design to previously tested model_____ and therefore is believed to meet the test requirements".

Maintaining such statements obviously provides benefit only to the certifying organization, which is usually the manufacturer.

The requirement for offerors to have and maintain Type A certificates provides no increase in safety and represents an unnecessary and onerous regulatory burden. We do agree, however, with the ST-1 561 requirement for consignors to have "instructions with regard to the proper closing of the packages."

Recommendation: Change existing 49 CFR 173.415(a) to substitute "manufacturer or distributor" for "offeror" and address instructions for proper closing of packages similar to ST-1 561.

6. ST-1 561 and current 49 CFR 173.476(a) require offerors of special form radioactive material to maintain a copy of the source safety analysis or Certificate of Competent Authority "C of C" on file for one year after the latest shipment.

In many cases involving the shipment of sealed sources, the C of C is not available or not identifiable because the actual source capsule present is not identified. In some cases the originally issued C of C has been allowed to expire because that particular source is no longer manufactured or the manufacturer has gone out of business. It is not clear whether an expired C of

C is acceptable. In these cases the only alternative is to ship the source as “Normal Form” in the absence of the appropriate documentation. In other cases it may be possible to obtain a current C of C, but only with significant effort, which may be impractical, resulting again in a Normal Form shipment. In fact, the closeness of the A1 and A2 values for most gamma emitters makes chasing C of C’s impractical in most cases.

Recommendation: Clarify existing 49 CFR 173.476(a) and (d) to reflect this practicality. Stating that if a C of C is not on hand then the shipment should be made as Normal Form may be enough.

Thank you for considering these comments as the DOT deliberates its proposed rulemaking. Please call our bureau if you have any questions.

Sincerely,

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